



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0827; Product Identifier 2019-SW-014-AD; Amendment 39-21120; AD 2020-10-02]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by Eurocopter France) Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2011-12-07 for Eurocopter France (now Airbus Helicopters) Model SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters. AD 2011-12-07 required repetitively inspecting the adhesive bead between the bushings and the Starflex star (Starflex) arms and the Starflex arm ends. This new AD retains the requirements of AD 2011-12-07 while omitting helicopters with an improved Starflex installed from the applicability. This AD was prompted by the development of the improved Starflex by Airbus Helicopters. The actions of this AD are intended to address an unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0827.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> in Docket No. FAA-2019-0827; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, any service information that is incorporated by reference, any comments received, and other information. The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101

Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email  
matthew.fuller@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to remove AD 2011-12-07, Amendment 39-16714 (76 FR 35346, June 17, 2011) (“AD 2011-12-07”) and add a new AD. AD 2011-12-07 applied to Eurocopter France (now Airbus Helicopters) Model SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters and required a repetitive inspection of the adhesive bead between the bushing and the Starflex arm for a crack, a gap, or loss of the adhesive bead and the Starflex arm ends for delamination. AD 2011-12-07 was prompted by three cases of deterioration of a Starflex arm end. In two of these cases, the deterioration caused high amplitude vibrations in flight, compelling the pilot to make a precautionary landing.

The NPRM published in the *Federal Register* on November 1, 2019 (84 FR 58638). The NPRM proposed to retain the requirements of AD 2011-12-07 but omit helicopters with an improved Starflex installed from the applicability.

The NPRM was prompted by EASA AD No. 2008-0165R1, dated June 30, 2017 (EASA AD 2008-0165R1), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters Model SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, SA 365 C, SA 365 C1, SA 365 C2, SA 365 C3 and SA 366 G1 helicopters, except helicopters with MOD 0762C37 installed in production. EASA advises that the Airbus Helicopters Starflex

manufactured with improved materials make the 10-hour repetitive inspections specified in the original issue of its AD, EASA AD No. 2008-0165, dated August 28, 2008 (EASA AD 2008-0165), unnecessary. EASA AD 2008-0165R1 retains the repetitive inspections from EASA AD 2008-0165 but does not apply to helicopters with the new Starflex installed.

### **Comments**

The FAA gave the public the opportunity to participate in developing this AD, but did not receive any comments on the NPRM.

### **FAA's Determination**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is issuing this AD after evaluating all information provided by EASA and determining the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

### **Differences Between this AD and the EASA AD**

The EASA AD uses the word "check," whereas this AD uses the word "inspect" instead. In some ADs, the FAA uses the word "check" to designate specific actions that may be performed by the owner/operator (pilot). An "inspection" is a maintenance action that must be performed by a certificated person as specified in 14 CFR 43.3.

## **Related Service Information Under 1 CFR part 51**

The FAA reviewed one document that co-publishes four Airbus Helicopters Emergency Alert Service Bulletin (EASB) identification numbers: No. 05.00.51 for Model 365N-series helicopters, No. 05.35 for Model 366G1 helicopters, No. 05.28 for Model 365C-series helicopters, and No. 05.00.21 for non FAA-type certificated military helicopters, all Revision 4 and dated November 20, 2014. EASB Nos. 05.00.51, 05.35, and 05.28 are incorporated by reference in this AD. EASB No. 05.00.21 is not incorporated by reference in this AD.

This service information specifies visually inspecting the adhesive bead on the bushes of the Starflex arm ends for bonding failure of the bushes and distortion of the Starflex arm ends. This service information also specifies inspecting the leading edges and the trailing edges of the Starflex arm ends for delamination.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Other Related Service Information**

The FAA reviewed Airbus Helicopters Master Servicing Manual (MSM) AS 365 N for Model SA-365N helicopters, MSM AS 365 N1 for Model SA-365N1 helicopters, MSM AS 365 N2 for Model AS-365N2 helicopters, and MSM AS 365 N3 for Model AS 365 N3 helicopters, all Revision 7 and dated October 9, 2017. This service information provides a schedule of maintenance tasks for the helicopters.

The FAA also reviewed one document that co-publishes four Eurocopter EASB identification numbers: No. 05.00.51 for Model 365N-series helicopters, No. 05.35 for

Model 366G1 helicopters, No. 05.28 for Model 365C-series helicopters, and No. 05.00.21 for non FAA-type certificated military helicopters, all Revision 3 and dated August 18, 2008. This service information specifies the same Accomplishment Instructions as Revision 4, which is issued under the name Airbus Helicopters, although Revision 4 excludes helicopters that have MOD 0762C37 installed.

### **Costs of Compliance**

The FAA estimates that this AD affects 35 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

Inspecting the Starflex takes about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$735 for the U.S. fleet per inspection cycle. Replacing the Starflex takes about 10 work-hours and parts cost about \$65,900 for an estimated cost of \$66,750.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

The FAA has determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866,
2. Will not affect intrastate aviation in Alaska, and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2011-12-07, Amendment 39-16714 (76 FR 35346, June 17, 2011), and adding the following new AD:

**2020-10-02 Airbus Helicopters (Type Certificate Previously Held by Eurocopter France):** Amendment 39-21120; Docket No. FAA-2019-0827; Product Identifier 2019-SW-014-AD.

**(a) Applicability**

This AD applies to Airbus Helicopters (Type Certificate previously held by Eurocopter France) Model SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters, certificated in any category, without Airbus Helicopters Modification 0762C37 (Starflex star arm part number (P/N) 365A31-1212-00 or P/N 365A31-1213-00) installed.

**(b) Unsafe Condition**

This AD defines the unsafe condition as failure of the Starflex star (Starflex) arm. This condition could result in high amplitude vibrations in flight and subsequent loss of control of the helicopter.

**(c) Affected ADs**

This AD replaces AD 2011-12-07, Amendment 39-16714 (76 FR 35346, June 17, 2011).

**(d) Effective Date**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(e) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(f) Required Actions**

Within 10 hours time-in-service (TIS) and thereafter at intervals not to exceed 10 hours TIS:

(1) Visually inspect the adhesive bead between the bushing and the Starflex arm for a crack, a gap, and loss of the adhesive bead, and inspect the Starflex arm ends for delamination in accordance with the Accomplishment Instructions, paragraphs 2.B.1. and 2.B.2. of Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 05.00.51, Revision 4, dated November 20, 2014 (EASB 05.00.51), EASB No. 05.35, Revision 4, dated November 20, 2014 (EASB 05.35), or EASB No. 05.28, Revision 4, dated November 20, 2014 (EASB 05.28), as applicable to your model helicopter.

(2) If there is a crack in the shockproof paint around the entire adhesive bead where the Starflex arm joins the bushing (as shown in Figure 2 of EASB 05.00.51, EASB 05.35, or EASB 05.28, as applicable to your model helicopter), a gap between the adhesive bead and the bushing (as shown in Figure 3 of EASB 05.00.51, EASB 05.35, or EASB 05.28, as applicable to your model helicopter), delamination of a Starflex arm end (as shown in Figure 4 of EASB 05.00.51, EASB 05.35, or EASB 05.28, as applicable to your model helicopter), or loss of adhesive bead (as shown in Figure 5 of EASB 05.00.51, EASB 05.35, or EASB 05.28, as applicable to your model helicopter), replace the Starflex before further flight.

**(g) Credit for Previous Actions**

Actions accomplished before the effective date of this AD in accordance with the procedures specified in Eurocopter Emergency Alert Service Bulletin Nos. 05.00.51, 05.35, or 05.28, all Revision 3 and dated August 18, 2008, as applicable to your model helicopter, are considered acceptable for compliance with the corresponding actions specified in paragraph (f) of this AD as long as the last inspection was accomplished within the prior 10 hours TIS.

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(i) Additional Information**

(1) Airbus Helicopters Master Servicing Manual (MSM) AS 365 N, MSM AS 365 N1, MSM AS 365 N2, and MSM AS 365 N3, all Revision 7 and dated October 9, 2017; and Eurocopter Emergency Alert Service Bulletin Nos. 05.00.51, 05.35, 05.28, and 05.00.21, all Revision 3 and dated August 18, 2008, which are not incorporated by

reference, contain additional information about the subject of this AD. For service information identified in this AD, use the contact information in paragraphs (k)(3) and (4).

(2) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD No. 2008-0165R1, dated June 30, 2017. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2019-0827.

**(j) Subject**

Joint Aircraft Service Component (JASC) Code: 6200, Main Rotor System.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 05.00.51, Revision 4, dated November 20, 2014.

(ii) Airbus Helicopters EASB No. 05.28, Revision 4, dated November 20, 2014.

(iii) Airbus Helicopters EASB No. 05.35, Revision 4, dated November 20, 2014.

Note 1 to paragraph (k)(2): Airbus Helicopters EASB Nos. 05.00.51, 05.28, 05.35, all Revision 4 and dated November 20, 2014, are co-published as one document along with Airbus Helicopters EASB No. 05.00.21, Revision 4, dated November 20, 2014, which is not incorporated by reference in this AD.

(3) For Airbus Helicopters service information identified in this AD, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 5, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-09947 Filed: 5/8/2020 8:45 am; Publication Date: 5/11/2020]